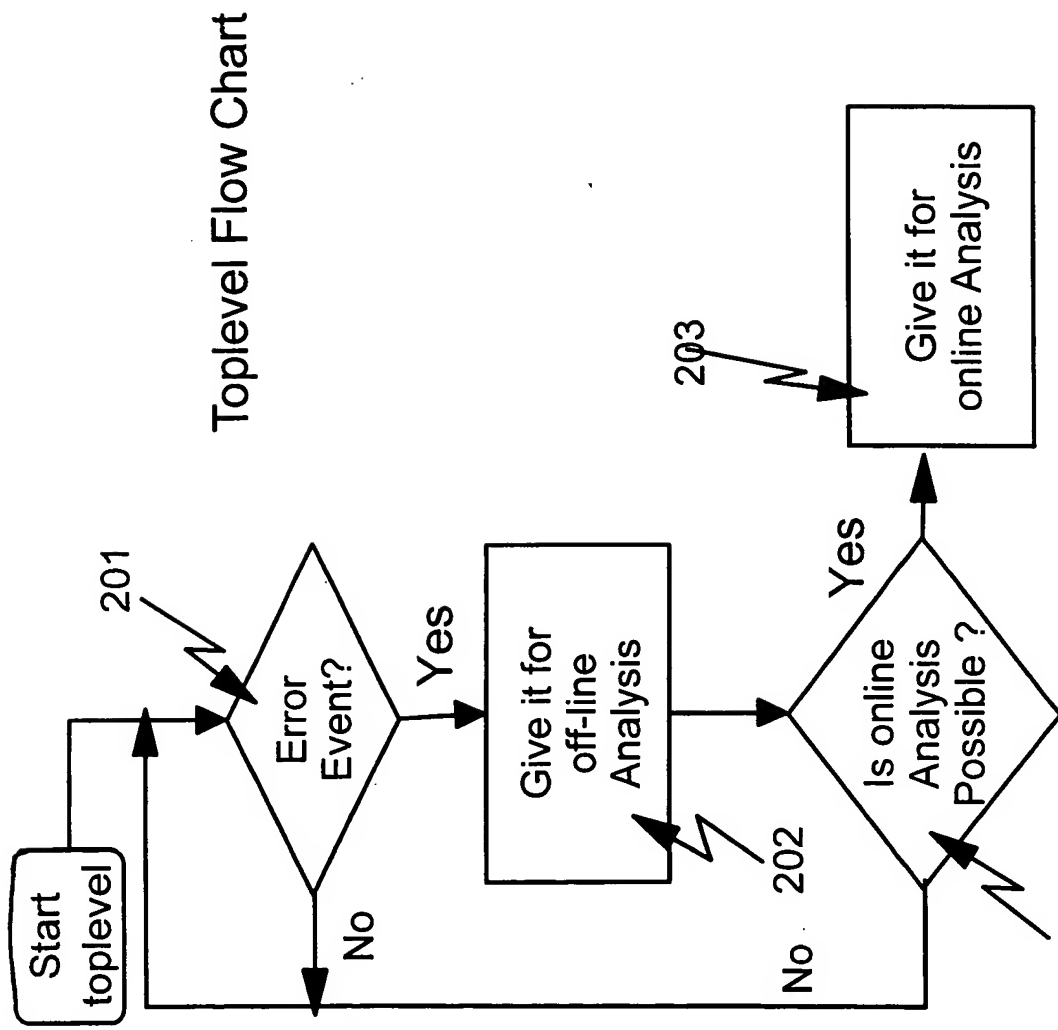


Fig 1. Event Logging Mechanism (100)



205

Figure 2

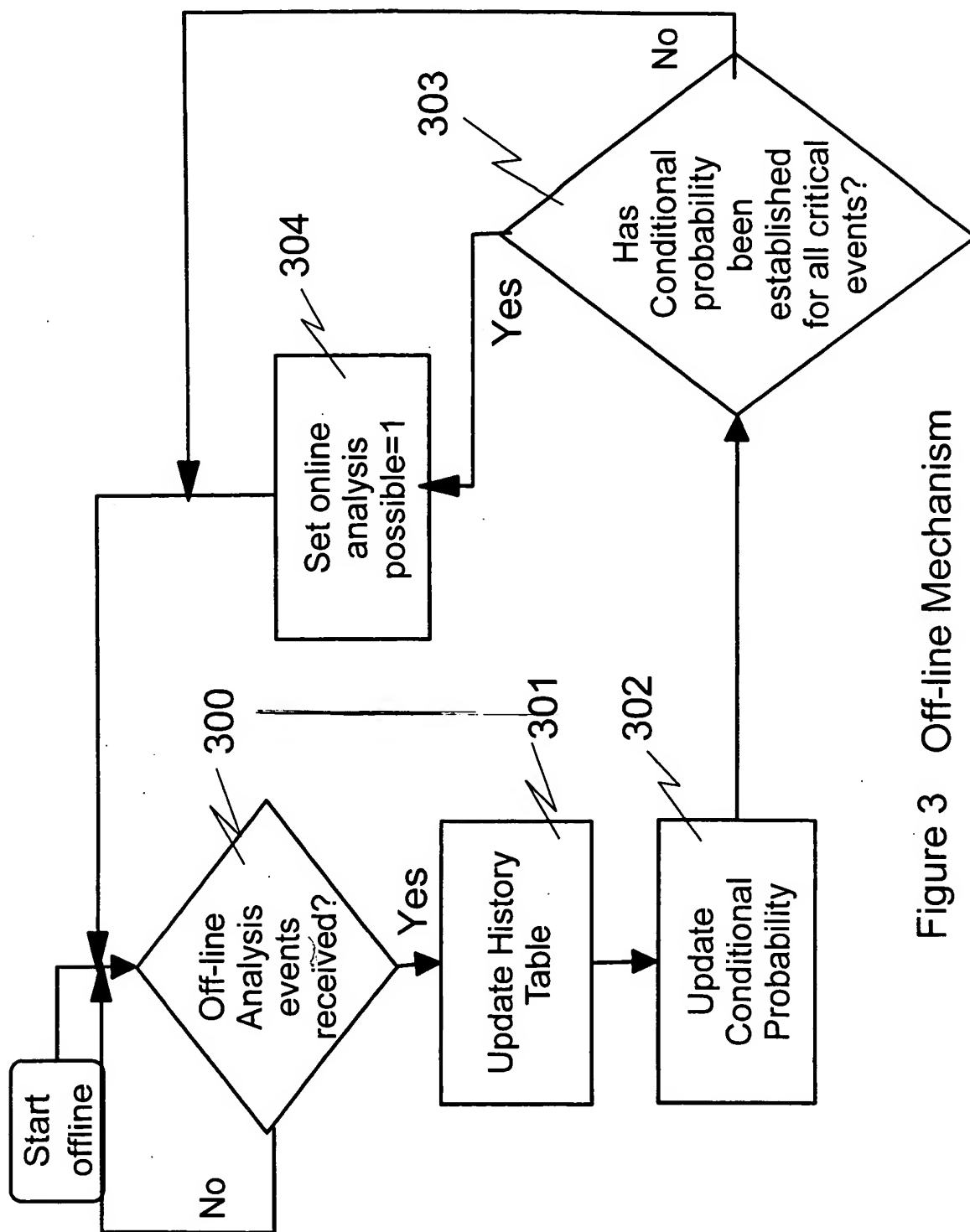


Figure 3 Off-line Mechanism

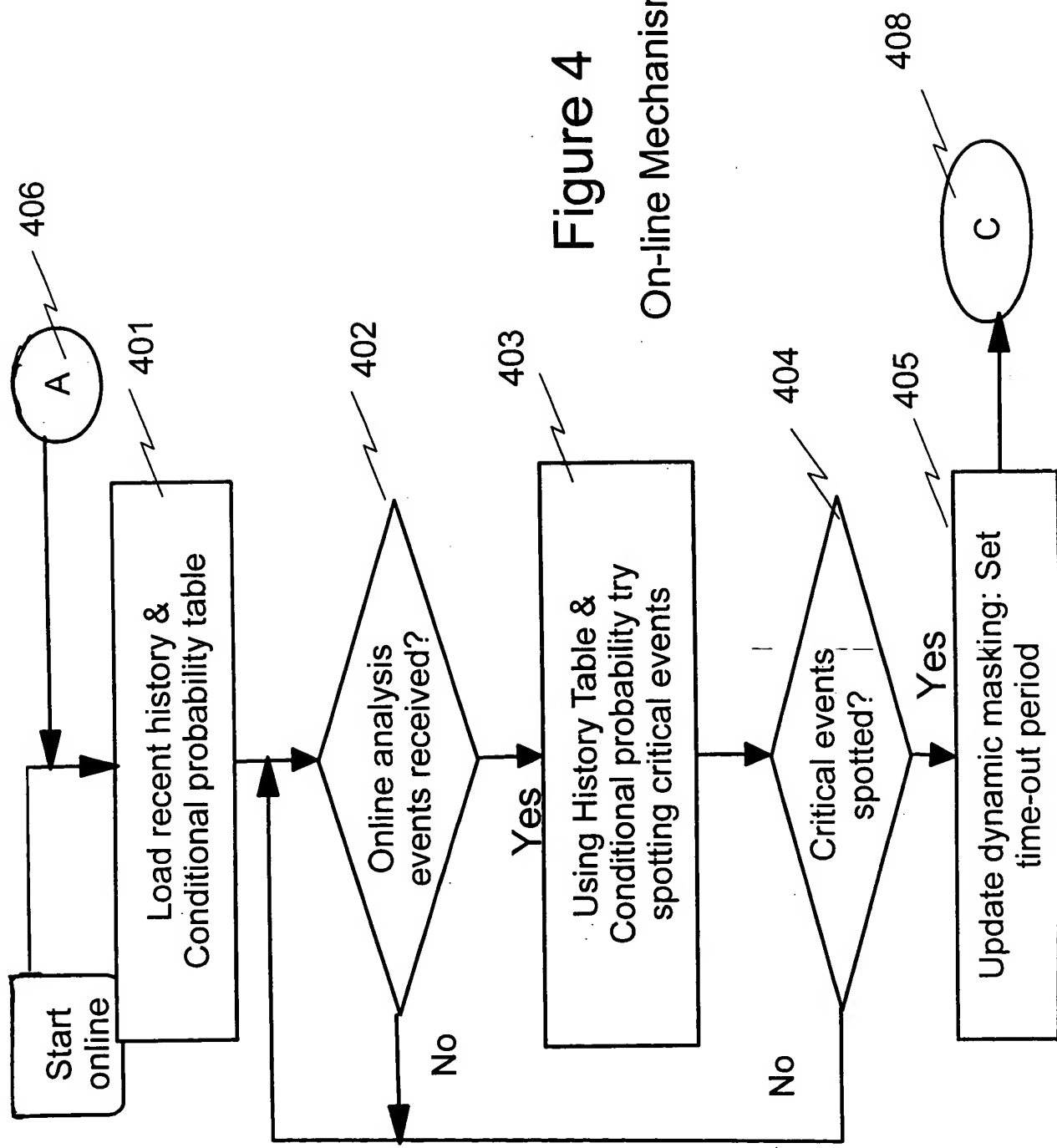
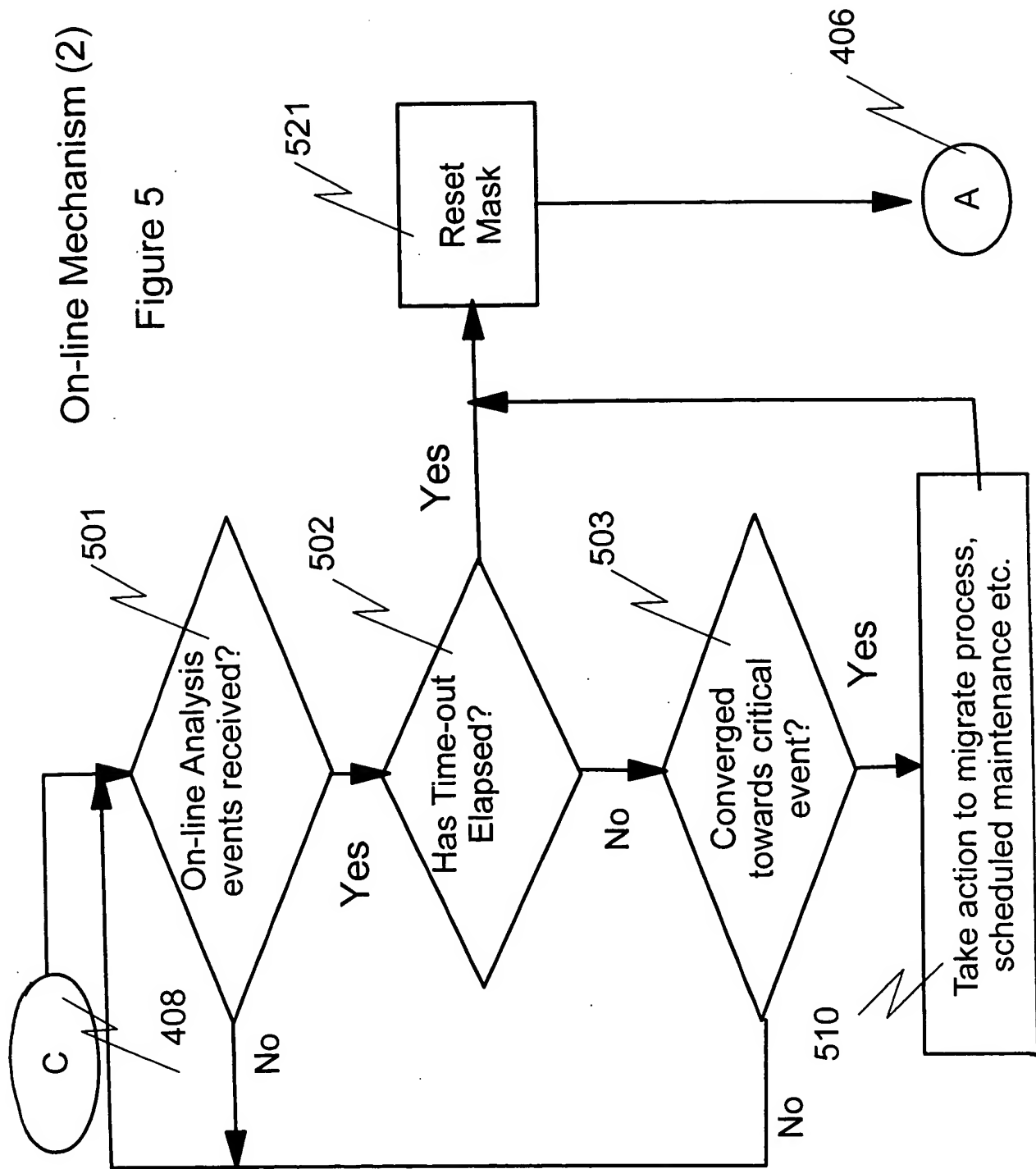


Figure 4

On-line Mechanism (1)

On-line Mechanism (2)

Figure 5



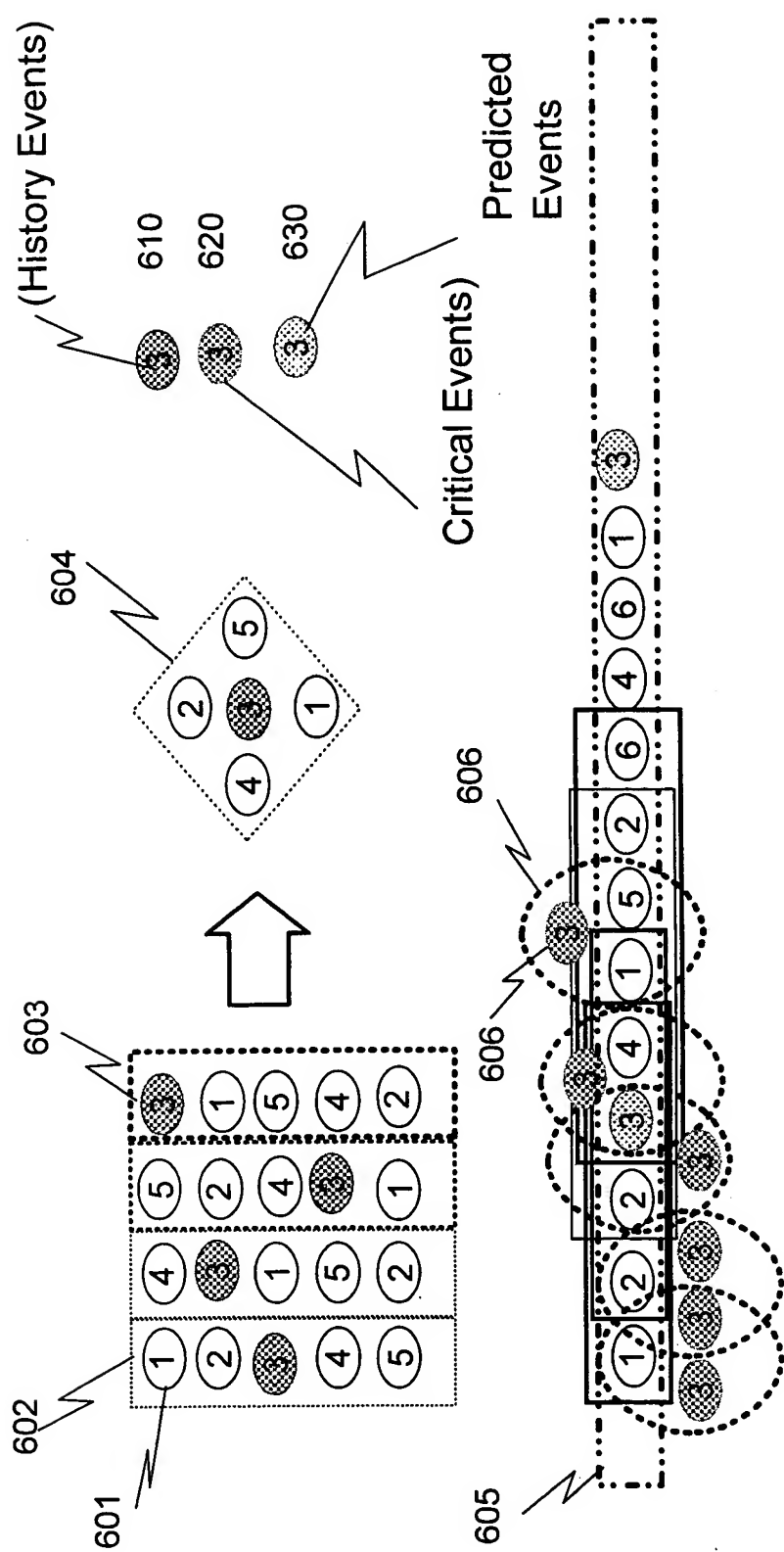


Figure 6 Dynamic Grouping Mechanism

Critical Event	Event Type/Id	Associated Non-critical Events	Conditional Probabilities	Joint probabilities
3	Severity (5)	1, 2, 4, 5	0.1 0.5 0.7 0.4	0.3 0.5 0.6
10	Severity (4)	3, 7, 9, 11, 13, 8	0.24 0.4 0.5 0.6	0.5 0.7 0.8
Cn		NCn	PN	JPN

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Figure 7. History table with probability (700)

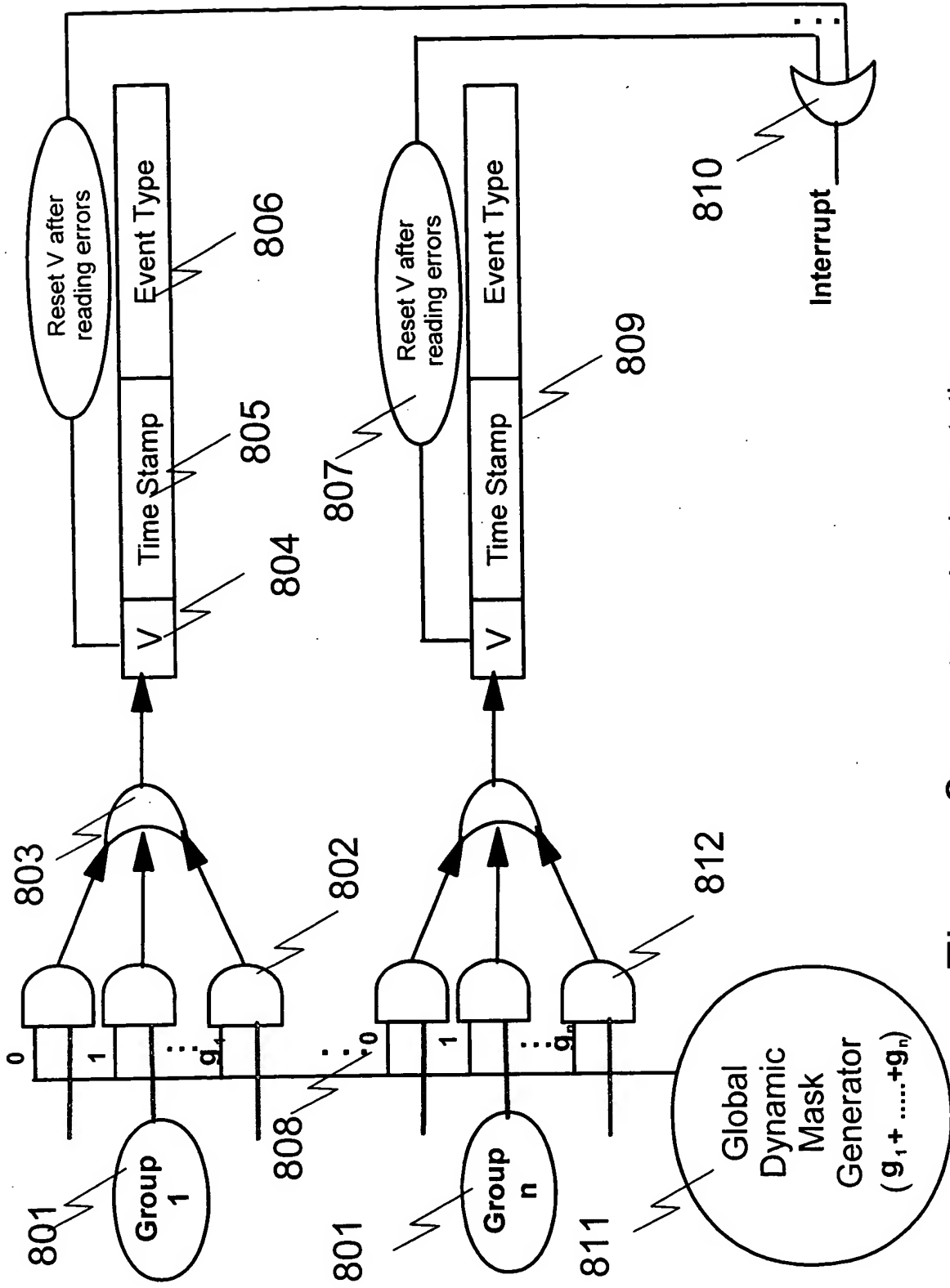


Figure 8 Hardware Implementation

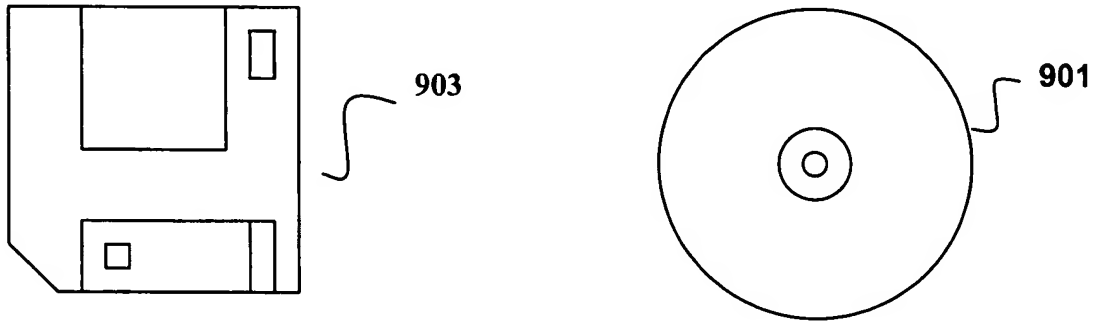


FIG. 9